

GenCore version 4.5  
Copyright (c) 1993 - 2000 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: January 9, 2002, 22:32:40 : Search time 534.05 seconds  
(without alignments)  
12460.642 Million cell updates/sec

Title: US-09-117-447-1

Perfect score: 3687

Sequence: 1 atgagatagaagaaagctgtt.....ttacattctataatgaata 3687

Scoring table:

IDENTITY\_NUC  
Gap 10.0, Gapext 1.0

Searched: 1353412 seqs, 902441831 residues

Total number of hits satisfying chosen parameters: 2706824

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database:

Pending Patents\_NA\_New:\*  
1: /cgn2\_6/ptodata/2/pna/PCN\_NEW\_COMB.seq:\*  
2: /cgn2\_6/ptodata/2/pna/US06\_NEW\_COMB.seq:\*  
3: /cgn2\_6/ptodata/2/pna/US07\_NEW\_COMB.seq:\*  
4: /cgn2\_6/ptodata/2/pna/US08\_NEW\_COMB.seq:\*  
5: /cgn2\_6/ptodata/2/pna/US09\_NEW\_COMB.seq:\*  
6: /cgn2\_6/ptodata/2/pna/US10\_NEW\_COMB.seq1:\*  
7: /cgn2\_6/ptodata/2/pna/US10\_NEW\_COMB.seq:\*  
8: /cgn2\_6/ptodata/2/pna/US60\_NEW\_COMB.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	54.6	1.5	7104	6	US-09-815-242-4580
2	54.6	1.5	7107	6	US-09-815-242-8291
3	50.4	1.4	7434	6	US-09-815-242-4761
4	50.4	1.4	7437	6	US-09-815-242-8869
5	48.4	1.3	2379	6	US-09-815-242-8229
6	48.4	1.3	2379	6	US-09-815-242-8694
7	45.6	1.2	1806	6	US-09-815-242-8260
8	45.6	1.2	1814	6	US-09-815-242-4205
9	45.6	1.2	45698	6	US-09-884-429-344
10	44.8	1.2	29485	6	US-09-785-381-6
11	44.2	1.2	386	5	US-09-865-419A-10533
12	44.2	1.2	493	5	US-09-669-817A-14523
13	44.2	1.2	38219	6	US-09-815-264-58099
14	44.2	1.2	396	6	US-09-933-524A-104709
15	43.8	1.2	442	6	US-09-985-678-248315
16	43.8	1.2	608	5	US-09-669-817A-21855
17	43.6	1.2	892	6	US-09-985-678-219252
18	43.4	1.2	1686	6	US-09-815-242-4510
19	43.4	1.2	1704	6	US-09-815-242-8854
20	43.4	1.2	1704	6	US-09-815-242-8854
21	43.2	1.2	273	6	US-09-985-678-3430
22	43.2	1.2	666	5	US-09-865-439A-44547
23	42.8	1.2	661	5	US-09-865-439A-20769
24	42.2	1.1	446	6	US-09-933-524A-106456
	42.2	1.1	17388	6	US-09-815-242-8512

26	42	1.1	271	6	US-09-912-293-10728	Sequence 10728, A
27	41.8	1.1	3438	7	US-10-005-368-198	Sequence 198, Ap
28	41.8	1.1	305107	7	US-10-005-368-1	Sequence 1, Appl
29	41.6	1.1	135	6	US-09-815-242-2135	Sequence 2135, Ap
30	41.6	1.1	282	6	US-09-815-242-1582	Sequence 1582, Ap
31	41.6	1.1	632	5	US-09-865-439A-30490	Sequence 30490, A
32	41.4	1.1	525	5	US-09-669-817A-9226	Sequence 9226, A
33	41.4	1.1	916	5	US-09-865-419A-16644	Sequence 16644, Ap
34	41.4	1.1	5613	6	US-09-873-676-114	Sequence 114, App
35	41.2	1.1	441	6	US-09-985-678-101327	Sequence 101327, Sequence 4279, Ap
36	41.2	1.1	2115	6	US-09-815-242-4279	Sequence 8224, Ap
37	41.2	1.1	2142	6	US-09-815-242-8224	Sequence 70626, A
38	41.2	1.1	146667	6	US-09-815-264-70626	Sequence 193, App
39	41	1.1	696	6	US-09-922-261-193	Sequence 189, App
40	41	1.1	699	6	US-09-922-261-191	Sequence 187, App
41	41	1.1	717	6	US-09-922-261-189	Sequence 185, App
42	41	1.1	774	6	US-09-922-261-187	Sequence 13686, A
43	41	1.1	819	6	US-09-922-261-185	Sequence 24843, A
44	41	1.1	889	6	US-09-849-526A-13686	
45	41	1.1	1330	5	US-09-865-419A-24843	

## ALIGNMENTS

RESULT 1  
US-09-815-242-4580  
Sequence 4580, Application US-09815242

GENERAL INFORMATION:

APPLICANT: Haselbeck, Robert

APPLICANT: Ohlsen, Karl L.

APPLICANT: Zyskind, Judith W.

APPLICANT: Wall, Daniel

APPLICANT: Trawick, John D.

APPLICANT: Carr, Grant J.

APPLICANT: Yamamoto, Robert T.

APPLICANT: Xu, H. Howard

TITLE OF INVENTION: Identification of Essential Genes in

FILE REFERENCE: ELITRA.011A

CURRENT APPLICATION NUMBER: US-09/815,242

PRIOR FILING DATE: 2001-03-21

PRIOR APPLICATION NUMBER: 60/191,078

PRIOR FILING DATE: 2000-03-21

PRIOR APPLICATION NUMBER: 60/206,848

PRIOR FILING DATE: 2000-05-23

PRIOR APPLICATION NUMBER: 60/207,727

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: 60/242,578

PRIOR FILING DATE: 2000-10-23

PRIOR APPLICATION NUMBER: 60/253,625

PRIOR FILING DATE: 2000-11-27

PRIOR APPLICATION NUMBER: 60/257,931

PRIOR FILING DATE: 2000-12-22

PRIOR APPLICATION NUMBER: 60/269,308

PRIOR FILING DATE: 2001-02-16

NUMBER OF SEQ ID NOS: 14110

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 4580

TYPE: DNA

ORGANISM: Staphylococcus aureus

US-09-815-242-4580

Query Match

Best Local Similarity 42.4%; Pred. No. 0.036;

Matches 361; Conservative 0; Mismatches 484; Indels 6; Gaps 1;

QY 628 gaagataacagcgtgtgaaagcagcaatgaacaaagctgtgtgacaa 687

Db 3100 gatagataatgtgtgcagcaatcgaatgataatgaacaaactaactgaagct 3159

QY	688	atcatcaatcattctaccaaaagtaaacagtgcttccaaactgaaactaacgaagtagcg	747
Db	3160	acatctcgagccattacaacctgtagtcaaatggttaaacaccacgagcaaacgaacttgc	3219
QY	748	aaaaaagcatatagatgacagatgagctgcgttactcccaaaagttgaaagtatgtagcg	807
Db	3320	gataaagtacaaagcgcaagaaacagcaatgtatgctataaacggtgycacaacacgaagaa	3279
QY	808	attaacatcaaaacaaagctgtgttgatattaacagcagctacacgltaacgycgaactaaa	867
Db	3280	aagcagctgcgaaacacacacagttcaaacctgtaaaaaacacacagctgatacgaacttgc	3339
QY	868	ttacaacttcagctgtctgcataatgaaagatacagtaacgctataactgtagctatctat	927
Db	3340	ggttcacatcaatgacagagttgaaagcgcgttaaaaatgycagaaattgtctaaatttga	3399
QY	928	aagttgacggtaaacattccattgccttaataagcgcgatgttcttctatctacagac	987
Db	3400	gcaatttcagccagcaaaaacaaactaaagataagatgycgaacaacgcaactgtctagaagcg	3459
QY	988	ggaaaaactatcactgtgtagtcttcacactccattggaanaataacagtagatataagta	1047
Db	3460	aatgaacgtataaacacagcaatcgcgtccaacgccaagacattactgcgtggaagaattgtagcg	3519
QY	1048	gtagtc-----aaagttataagaacaaaatgycaaagaaatttaaagaagatgctatc	1101

```

1 CURRENT FILING DATE: 2001-03-21
2
3 PRIOR APPLICATION NUMBER: 60/191,078
4
5 PRIOR FILING DATE: 2000-03-21
6
7 PRIOR APPLICATION NUMBER: 60/206,848
8
9 PRIOR FILING DATE: 2000-05-23
10
11 PRIOR APPLICATION NUMBER: 60/207,727
12
13 PRIOR FILING DATE: 2000-05-26
14
15 PRIOR APPLICATION NUMBER: 60/242,578
16
17 PRIOR FILING DATE: 2000-10-23
18
19 PRIOR APPLICATION NUMBER: 60/253,625
20
21 PRIOR FILING DATE: 2000-11-27
22
23 PRIOR APPLICATION NUMBER: 60/257,931
24
25 PRIOR FILING DATE: 2000-12-22
26
27 PRIOR APPLICATION NUMBER: 60/269,308
28
29 PRIOR FILING DATE: 2001-02-16
30
31 NUMBER OF SEQ ID NOS: 14110
32
33 SOFTWARE: FASTSQ for Windows Version 4.0
34
35 SEQ ID NO 8291
36
37 LENGTH: 7107
38
39 TYPE: DNA
40
41 ORGANISM: Staphylococcus aureus
42
43 FEATURE:
44
45 NAME/KEY: CDS
46
47 LOCATION: (1)..(7107)
48
49 US-09-815-242-8291

```

Query Match 1.5%; Score 54.6; DB 6; Length 7107;  
Best Local Similarity 42.4%; Pred. No. 0.036;  
Matches 361; Conservative 0; Mismatches 484; Indels 6; Gaps 1;

QY	1162	aacgcttcgttaactatgacgaggttacttcggaacgtgaagatcttaacagtagta	1221
Db	3640	ccaacagcttaataaanaaagaacacgagttacagacgcgaanaataatatacagctgca	3659
QY	1222	tttgaatagttgttgacccgtgaacgtgtgaacagctcgaaagttactatcacagatgt	1281
Db	3700	actgatgatatgtgtgtgagatcacggaagaatgcaggttaaaatctgattcaagaatca	3759
QY	1282	gaaactggaanaacgcattccagtaattgcatactactctcgtgttcacaattactatcgc	1341
Db	3760	caacacgaacacgcgcgtttaataatgcttaanaatgagtgtgaccaagcctgtgcaact	3819
QY	1342	ttaaaagaagcgttagtaactgtgttaacaataaactgtctataatgttaanaaca	1401
Db	3820	caaatcaagcaattgataataacactgtgtgtcacacagaaagaaaaaatgycagcaaaa	3879
QY	1402	ttaaactgtgttaacatgcagaagcttcagagtttagtgttcaatgcgaacgcatacgacca	1461
Db	3880	gattttagttttaaaagctaaagaanaagcgtatacaagatatcttaatgycacaacaact	3939
QY	1462	actgttgctac	1472
Db	3940	aacgatgttac	3950

RESULT 2  
 US-09-815-242-8291  
 : Sequence 8291, Application US/09815242  
 : GENERAL INFORMATION:  
 : APPLICANT: Haselbeck, Robert  
 : APPLICANT: Ohlsen, Karl L.  
 : APPLICANT: Zyskind, Judith W.  
 : APPLICANT: Wall, Daniel  
 : APPLICANT: Trawick, John D.  
 : APPLICANT: Carr, Grant J.  
 : APPLICANT: Yamamoto, Robert T.  
 : APPLICANT: Xu, H. Howard  
 : TITLE OF INVENTION: Identification of Essential Genes in  
 : TITLE OF INVENTION: Prokaryotes  
 : FILE REFERENCE: ELIIRA.011A  
 : CURRENT APPLICATION NUMBER: US/09/815,242

QY	628	gaagtaagaagcgtctggaagcaagcgaatttagacaagaagcgtgcgtctgataca	687
Db	3100	gataagataatgctgcgaacaaatactgtatgtataaagcaaaaactcaactaagaagc	3159
QY	688	atcaatcaatacttaccacaagaagtaacagtgctcttcaaacctgcaactaacgaagtacg	747
Db	3160	acaatcgacgacattacactgtatgcataatgttaaacacacagcaaaccaagcaattgc	3219
QY	748	aaaaagcattagatgcagatgtgaagctgcgcttaccctccaaaagttgaagtgtaatgcg	807
Db	3220	gataaagatacaagcgcaagaacaagcaatltgaatgcataacggtgcacaacaggaagaa	3279
QY	808	atlaacaactcaaaacaagaagctgtgaattaacgcgcatgcacgtgaacgggaacataaa	867
Db	3280	aagcagcgtcggaacaacaaacagttccaactgtaaaaaacacagctgatacgaacttgat	3339
QY	868	ttacaactttcaagctgtgttgaatltgaagatacagtaacagtaaatatgcgtatctcat	927
Db	3340	ggctgcacatacaaaatgcagaagtttgaagcgcgtcaaaaatgcggaattgtctaaattga	3399
QY	928	aaagtggacggttaaacattccattctgccttaacagcgacagatgttcttactacagac	987
Db	3400	gcatttcagcgacgaacacaactaaagatgaatgtgaaccaagcaattctgcagaagcg	3459
QY	988	ggaaaaactatcactgtggtgttcaacttccattcgaataataacggagtataaagta	1047
Db	3460	aatgaacgtataaaacagcaatcgcgttcaacgcgaagatcatctgcgtgaagaanaattgcagcg	3519
QY	1048	gtagtt-----aaaggtattaagaacaaaatgtgcaagaattaaagaagatgcattc	1101
Db	3520	gcgaatgcgaatgtagataatgtctgtgcacaacagcaataatacaacatttgaagctgcgtaat	3579
QY	1102	acttccaagcttcgaaatgaatgtctgtagttaactcaagtglttggaaactaatgtacaacaa	1161
Db	3580	agtcacaaatgatgtagcgccaagcgaaacaaacactgtgtgaagctagattgtacaagtaaca	3639
QY	1162	aacgtctctgtaacttagagcaggttactttcgcgaacgtgaacttactttaaagtgta	1221
Db	3640	ccaacagttataataaaagcaacagcaggtttacagacgcgcaaaaataaatatcacagctgca	3699
QY	1222	ttgatagatgttttagacacctgaaactgttaaacagctgcgaacglttactattacagatgt	1281

Dh 3700 actgatgataatggtgtagatagacagcgaaagatgacaggtlaanaaactgcattcaaaagtaca 3759  
Qy 1282 gaacctggaagaacgcatcccgtaattgcattctcttggttttaacattacattacg 1341  
Dh 3760 caaccagcaaaacggtgttaaatcaatgcttaaaaaatgattgttgcacagcggtgacaact 3819  
Qy 1342 ttaaaaagacggtttagtaactcgtglaaacaataactgtgtatccaaatgltlaaaca 1401  
Dh 3820 caaataatgaagaattgttaataacacacggtgtctcaactgtaagaaaaatgacgcaaaaa 3879  
Qy 1402 ttaactgttacaatgacagaaagcttacagagttagttgttcaactgtaaacgcacgaccca 1461  
Dh 3880 gatttagttttaaagcttaaaagaaagcgatatacgaattactttaaactgcaacaacaact 3939  
Qy 1462 actgtgtctac 1472  
Dh 3940 aacgattgtac 3950  
  
RESULT 3  
US-09-815-242-4761  
Sequence 4761, Application US/09815242  
GENERAL INFORMATION:  
APPLICANT: Haselbeck, Robert  
APPLICANT: Ohlson, Karl L.  
APPLICANT: Zyskind, Judith W.  
APPLICANT: Wall, Daniel  
APPLICANT: Trawick, John D.  
APPLICANT: Carr, Grant J.  
APPLICANT: Yamamoto, Robert T.  
APPLICANT: Xu, H. Howard  
TITLE OF INVENTION: Identification of Essential Genes in  
FILE OF INVENTION: Prokaryotes  
FILE REFERENCE: EITRA.011a  
CURRENT APPLICATION NUMBER: US/09/815,242  
CURRENT FILING DATE: 2001-03-21  
PRIOR APPLICATION NUMBER: 60/191,078  
PRIOR FILING DATE: 2000-03-21  
PRIOR APPLICATION NUMBER: 60/206,848  
PRIOR FILING DATE: 2000-05-23  
PRIOR APPLICATION NUMBER: 60/207,727  
PRIOR FILING DATE: 2000-05-26  
PRIOR APPLICATION NUMBER: 60/242,578  
PRIOR FILING DATE: 2000-10-23  
PRIOR APPLICATION NUMBER: 60/253,625  
PRIOR FILING DATE: 2000-11-27  
PRIOR APPLICATION NUMBER: 60/257,931  
PRIOR FILING DATE: 2000-12-22  
PRIOR APPLICATION NUMBER: 60/269,308  
PRIOR FILING DATE: 2001-02-16  
NUMBER OF SEQ ID NOS: 14110  
SOFTWARE: FASTSEQ for Windows Version 4.0  
SEQ ID NO 4761  
LENGTH: 7434  
TYPE: DNA  
ORGANISM: Staphylococcus aureus  
US-09-815-242-4761  
  
Query Match 1.4%; Score 50.4; DB 6; Length 7434;  
Best Local Similarity 41.3%; Pred. No. 0.31;  
Matches 715; Conservative 0; Mismatches 981; Indels 36; Gaps 4;

Dh 2512 aaatgattgct-----ataatgaagttaaacaagctgcaacgctagaanaa 2559  
Qy 232 cgataccgtgtagtggtagcatatgtaataaagcaggtgcggaanaaaagagcttac 291  
Dh 2560 gctcaaaatgtcgaagtttcaaatgcaacaataatgaagaatgagaagagctgtagcagca 2619  
Qy 292 ttaagctatttacaanaagaatgaaactatgcttttccaagaaccccttaattcggc 351  
Dh 2620 gtaatgtagcgtcctcaaaagcgaaggtttacatgacatcccaagtgtttaaatccaacagga 2679  
Qy 352 gaagctgtgtagaaactatcatcgatgctgtacactatgacaaataaattagcgaatg 411  
Dh 2680 gtgtgtatatacaaatccaagaatgattagataaataccaatgcaatccaacaagaacaaa 2729  
Qy 412 cgcgaagagctagaggtgctgtgttcaagcgaanaagattagaanaagcagaacatattat 471  
Dh 2740 gtaaacctgtagctgtacggaagtagaanaagcatalataacglaaacagaagaatt 2799  
Qy 472 cacaanaatcccttagaataaataaaccgcagctcaatttagatcggtatagyttaa 531  
Dh 2800 caaataatgcaatgcttcaactacagaaagaanaaacaagctgcatatatacagaattgatact 2859  
Qy 532 acaactcgtgatttactcgtctacatlttaagcaanaagcacaagaactcgcagcagc 591  
Dh 2860 aaaaagcaagaagcagaagaacaatcttgatgctgcaataatacaacagtgatgtaacaca 2919  
Qy 592 ttaatttatgatttaccgttgcataaagcgcggaagtagacaagcgtgtgtaagca 651  
Dh 2920 gctaaagcaaatgattatgctgcaatlaaagtltaagctgccaacaaagaaatcg 2979  
Qy 652 ggcattttagacaagctgaagcgtggtgtatccaataatcaactacttcaacaagta 711  
Dh 2980 g---atgcaaaagcggaaatcgtcccaaaagcaagtagtaacgtlaaacaacgaattggaagca 3026  
Qy 712 acagatgcttccaactgaactacagaaagtagcgaanaaaagcattagatgcatgtaa 771  
Dh 3037 atgattgattgactacatgaaagaacacaacagcagcgaagaagcagatgcatgcaagca 3096  
Qy 772 gctggttactccaagaagtgtaagtgtaagtgcatlaaacactcaacaaga----- 826  
Dh 3097 gttactgcaaacgtgtatagataagataatgctgcagcaacaatgattgtgataatgcaaaa 3156  
Qy 827 -ctgtgaattaaacagcagtaacagtgtaacggaacactaaatcaacttcagctgct 885  
Dh 3157 actcaaaatgaagctcaaatcgcagccaattacaccgtgattgcaaatglttaaacgcagca 3216  
Qy 886 gcaaatgaagaatagcagtaaacgtaactatcgtatctataaagtggagcgtgaact 945  
Dh 3217 aaacgaagaattgacagataaagatacaagctcaagaacagcaattgtgtgaaataacagc 3276  
Qy 946 ccatttgcctttaaagcagcagatgttcttatactacagaacggaanaaactataactgtg 1005  
Dh 3277 tcaacaactggaagaaagcagcgtctaaacaacaagtlccaactggaanaaacaacagct 3336  
Qy 1006 gatgcttcaactcattcgcgaataataatagcagatagaatagtagttaaaggtattaa 1065  
Dh 3337 gatgcgcaataagatgcagcacaacaatgcygaagttggaagcgtcgaataaagcagca 3396  
Qy 1066 gacaaaatgycgaagaatlttaagaagatgcatcttcaacttcaagcttcgaaatgattgt 1125  
Dh 3397 attgctaaatltgaaaggtattcagcagcaacacaaactaaagttaattgcaagaagca 3456  
Qy 1126 gtatgtactcaagtgttggaaactaatgtlaaca-----acaacttct 1170  
Dh 3457 attgctcgaagcgaatgaaagcgtlaaaaacgcaatcgtccaacgcaagcattatcgtct 3516  
Qy 1171 gtaactttagcagcaggttacttgcacacgacgaactactttaaagtagtaattgtgaaag 1230  
Dh 3517 gaagaatltgcagcgtgaatgcygacgtagatataatgctgtgacacaagcacaatagcaac 3576  
Qy 1231 ttgtttagcacttgaataatgtaaacagctcgaaagcttactatacagaattgttgaacacgga 1290  
Dh 3577 attgaagctgttaattgtaaaatgattgattgacgaacggaagcaggttgaaataatgatt 3636

```

Qy 1291 aaacgcatccgaatgatgcatcttctgttctacaaattactacgtttaaagaa 1350
Db 3637 attgatcaagtaacacacacggttaataaaaaagcaatgcagtaataatgcacga 3696
Qy 1351 gcytagtaactggttaacataataactgtctatcaataatgttaaaacattactgt 1410
Db 3697 atttaataacaattgcagagatctcaagctacgcagcatgcacagatgaagaaaa 3756
Qy 1411 tacatgtagaagcttaagagtagtcttcaactgcaaacgcacgcacccactgttct 1470
Db 3757 caagcagctgtagtgcgaagcaatactgaaatgtgtaagcaaatcaacatltcaaga 3816
Qy 1471 accgctctactacttgggtggtacaaacttatctactgtgtctctcaacaacatgtt 1530
Db 3817 gcaactactaacgcacaaagtgtgtaagactaaagcaaatgcagaagcgcgattatgcg 3876
Qy 1531 tgggttaaatgtgctgtgtgtgtaataagctggaacttattctcgtcttcaatc 1590
Db 3877 gtaacaccaaaagtgtgtaagaaacacgacgctlaaagatgaattgaltcaattcaaga 3936
Qy 1591 acaacaacgttgcactaagttagacgaatcctactttagcgtataacttgtatgtt 1650
Db 3937 acgcacaacaaatgtataataatgatacagaacgctacacagaagaaagaaagcagct 3996
Qy 1651 gaaaaagactggtacagctgtgtctctcgaactaaataaagcagacgactaaatg 1710
Db 3997 attcaacaatttagcaacacgagctttagcagacggaataataatataacgctgcaactgat 4056
Qy 1711 gtaacttagtgcacaaagcggacctaagaanaatacaatctcaatca 1762
Db 4057 gataatgtgtagatcagcagcgaagaacgctgtaagaatltcaatcaagca 4108

```

## RESULT 4

US-09-815-242-8869  
Sequence 8869, Application US/09815242

## GENERAL INFORMATION:

APPLICANT: Haselbeck, Robert  
APPLICANT: Ohlsen, Karl L.  
APPLICANT: Zyskind, Judith W.  
APPLICANT: Wall, Daniel  
APPLICANT: Trawick, John D.  
APPLICANT: Carr, Grant J.  
APPLICANT: Yamamoto, Robert T.  
TITLE OF INVENTION: Identification of Essential Genes in  
FILE REFERENCE: EUTRA.011a  
CURRENT APPLICATION NUMBER: US/09/815,242  
PRIOR FILING DATE: 2001-03-21  
PRIOR APPLICATION NUMBER: 60/191,078  
PRIOR FILING DATE: 2000-03-21  
PRIOR APPLICATION NUMBER: 60/206,848  
PRIOR FILING DATE: 2000-05-23  
PRIOR APPLICATION NUMBER: 60/207,727  
PRIOR FILING DATE: 2000-05-26  
PRIOR APPLICATION NUMBER: 60/242,578  
PRIOR FILING DATE: 2000-10-23  
PRIOR APPLICATION NUMBER: 60/253,625  
PRIOR FILING DATE: 2000-11-27  
PRIOR APPLICATION NUMBER: 60/257,931  
PRIOR FILING DATE: 2000-12-22  
PRIOR APPLICATION NUMBER: 60/269,308  
PRIOR FILING DATE: 2001-02-16  
NUMBER OF SEQ ID NOS: 14110  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 8869  
LENGTH: 7437  
TYPE: DNA  
ORGANISM: *Staphylococcus aureus*  
FEATURE:  
NAME/KEY: CDS

LOCATION: (1)...(7437)  
US-09-815-242-8869

Query Match 1.4%; Score 50.4; DB 6; Length 7437;  
Best Local Similarity 41.3%; Pred. No. 0.37;  
Matches 715; Conservative 0; Mismatches 981; Indels 36; Gaps 4;

```

Qy 52 agtgcatttgcgtgcacatccaaacgcctcttgaagcgggtacagatgagcaacgta 111
Db 2392 aatgcagctaaagtcttcggtgtttaaagcaattgaagcgaacacgactgcacaagatta 2451
Qy 112 gtaagccaagcaaaagcagcttcaaaaagcatalactatcaagccacagtaagc 171
Db 2452 gaaagagttaaanaacgaagaatctcaaaaatltgaatatattactgactctacaaaca 2511
Qy 172 gaaactgtgtaattcccaacaatcaacgctatatactgtgataatacaaaaagcaaaa 231
Db 2512 aaaaatgtagtct-----ataatgaattaaacaacagctgcacagctagaataa 2559
Qy 232 cgatacgtgtgtagcgtgtagcatagtgataaagcaggtggtgcgcaaaaagacgttac 291
Db 2560 gctcaaaatgtctacagtttccaatgcaacaataatgaagaagtagcagacgtgtgtagcga 2619
Qy 292 ttagctgatttcaaaaagaatataatgaactacgcttccaagcaaaccttaaatctggc 351
Db 2620 gtagtgcagctcaaaaagcaagtttatacagatccaaagttgttaataatacaaaaagaa 2679
Qy 352 gaagctcgtgtgtagcaacttaccatgcagttcttacaactatgcaacaataatgaagaagt 411
Db 2680 gltgctgatacaaaatccaaaagtattagtaaaatcaatgcgaatltcaaacacgaagcaaa 2739
Qy 412 cgcacaagcctgaagcgtgcgtcttcaagaagaatltagaanaagcgaacaatactat 471
Db 2740 gttaaacctgcagctgatacgaagtagaanaacgcatataacacgtaaaacaaagaat 2799
Qy 472 cacaacaatccttatgaaatlaaaacttcgcacagtcattttagatcgcgtatagttaa 531
Db 2800 caaaatgaacatgtcttcaactacagaagaanaaacagctgtcatatacagaattagatct 2859
Qy 532 acaactgtgatttaactcttcgtcttcaacttlaaagcaaaaagcacaagaacttcgcagcgc 591
Db 2860 aaaaagcagaagcagaagaacaatcttgaatctgcgaataatacaaaaagtgatgtaacaaca 2919
Qy 592 ttaatttataatcacgctgtgcaatgaaagcgcgcgaagtagcaagacgcgtgtgaaagca 651
Db 2920 gctaaagcaatagatattgttcgcaattatcaagttaacgctgcacacactaagaatcgc 2979
Qy 652 ggcatttagacaagaagcctaaagctgctgtgatacaatcaatcaactactccaaaagta 711
Db 2980 g--atgcaaaagcggaaatcgtctcaaaaagcaagtgaacgtlaaaacagcaattgaagca 3036
Qy 712 acagtgcttccaacacgtgaactacagaagtaggaanaaaagccttagatgcagatgaa 771
Db 3037 atgaatgtctgcagctacacgaagaacaacagcaggaagaagatggtgatacaacagta 3096
Qy 772 gctgcgttactccaaaagctgaaagctgaagtgcgtatgaacactcaacaacaag----- 826
Db 3097 gttactgcacaacgcgtatataatgtctgcaggaacaacatgtatgtataatgacaaa 3156
Qy 827 -ctgttgaaatlaacagcagtaacgtagaagcgaacataaaattacaacttcaagctgct 885
Db 3157 actcaaaatgaagctcaacatcgcacacttacaactgttgcgaatgtttaaaccacagca 3216
Qy 886 gcaaatgaaagatacagtaaacgttaaatctgtacgtatctataaagtgtgaagtaact 945
Db 3217 aaacaagaatltgcagataaagctcaagctcaagaacaagcaatgtgaagataacgac 3276
Qy 946 ccatlgtcccttaacgagcagatgttcttattacacagcgaanaaacatacactgtg 1005
Db 3277 tcaaacactgaagaagaagcagctgtcaacaacaacagttcaaacgtgaanaaacacagct 3336
Qy 1006 gatgcttaactccattcgaataataatacagagataaagtagtagtaagatgattaa 1065

```



```

RESULT 7
US-09-815-242-8260
: Sequence 8260, Application US/09815242
: GENERAL INFORMATION:
: APPLICANT: Haseldeck, Robert
: APPLICANT: Ohlsen, Kari L.
: APPLICANT: Zyskind, Judith W.
: APPLICANT: Wall, Daniel
: APPLICANT: Frawick, John D.
: APPLICANT: Carr, Grant J.
: APPLICANT: Yamamoto, Robert T.
: APPLICANT: Xu, H. Howard
: TITLE OF INVENTION: Identification of Essential Genes in
: TITLE OF INVENTION: Prokaryotes
: FILE REFERENCE: ELITRA.011A
: CURRENT APPLICATION NUMBER: US/09/815,242
: CURRENT FILING DATE: 2001-03-21
: PRIOR APPLICATION NUMBER: 60/191,078
: PRIOR FILING DATE: 2000-03-21
: PRIOR APPLICATION NUMBER: 60/206,848
: PRIOR FILING DATE: 2000-05-23
: PRIOR APPLICATION NUMBER: 60/207,727
: PRIOR FILING DATE: 2000-05-26

```

RESULT 8  
US-09-815-242-2025  
Sequence 4205, Application US/09815242  
GENERAL INFORMATION:  
APPLICANT: Haselbeck, Robert  
APPLICANT: Ohlsen, Karl L.  
APPLICANT: Zyskind, Judith W.  
APPLICANT: Wall, Daniel  
APPLICANT: Trawick, John D.  
APPLICANT: Carr, Grant J.  
APPLICANT: Yamamoto, Robert T.  
APPLICANT: Xu, H. Howard  
TITLE OF INVENTION: Identification of Essential Genes Involved in  
Title of Invention: Prokaryotes  
FILE REFERENCE: FLITRA 011A  
CURRENT APPLICATION NUMBER: US/09/815,242  
CURRENT FILING DATE: 2001-03-21  
PRIOR APPLICATION NUMBER: 60/191,078  
PRIOR FILING DATE: 2000-03-21  
PRIOR APPLICATION NUMBER: 60/206,848  
PRIOR FILING DATE: 2000-05-23  
PRIOR APPLICATION NUMBER: 60/207,727  
PRIOR FILING DATE: 2000-05-26  
PRIOR APPLICATION NUMBER: 60/242,578

```

; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 4205
; LENGTH: 1814
; TYPE: DNA
; ORGANISM: Staphylococcus aureus
US-09-815-242-4205
```

```
Query Match      1.2%; Score 45.6; DB 6; Length 1814;
Best Local Similarity 46.3%; Pred. No. 2.3;
Matches 150; Conservative 0; Mismatches 174; Indels 0; Gaps 0;
```

```
QY 752 aagcattgacagatgaagctgcgtctactccaaagttgaagttgaagtcgatta 811
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 320 aaacacgtttgtacttaaaaagcgctagaacaaacctgtgtgtgtgtgtgtgt 379

QY 812 acacccaacaaagctgttaattaacagcagttaccagttgaagcagcaactaaattac 871
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 380 ataaattgataaacaacacagcagtcacagaggtgtgtgtgaagaaagtttagattac 439

QY 872 aacttcagctgctgcaaatgaagatacagtaaacgttaactgttaagttacataaag 931
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 440 ttattgaattgaagcaagataagtaacattagaattccctgtgtgtgtgtgtgtgt 499

QY 932 tggacggttaacattccattgtcccttaatacggcagatgttcttactacagaacgaa 991
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 500 taatgtgacagctgactgttagctctgataacaaagatgataattacattatattatg 559

QY 992 aaactatactgtgattgcttcaactcatctcgaaataataacgagataaagtagtag 1051
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 560 aaacaattatgattatgttaccagctcaattgataacagtgagagccattacattcc 619

QY 1052 ttaaagttatcaagaacaaaatg 1075
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 620 aagtagcattgttgacatacatg 643
```

```

RESULT 9
US-09-984-429-344/c
; Sequence 344, Application US/09984429
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 53 Human Secreted Proteins
; FILE REFERENCE: P2018P2
; CURRENT APPLICATION NUMBER: US/09/984,429
; PRIOR FILING DATE: 2001-10-30
; PRIOR APPLICATION NUMBER: 60/244,591
; PRIOR FILING DATE: 2000-11-01
; PRIOR APPLICATION NUMBER: 09/288,143
; PRIOR FILING DATE: 1999-04-08
; PRIOR APPLICATION NUMBER: PCT/US98/21142
; PRIOR FILING DATE: 1998-10-08
; PRIOR APPLICATION NUMBER: 60/061,463
; PRIOR FILING DATE: 1997-10-09
; PRIOR APPLICATION NUMBER: 60/061,529
; PRIOR FILING DATE: 1997-10-09
; PRIOR APPLICATION NUMBER: 60/071,498
; PRIOR FILING DATE: 1997-10-09
; PRIOR APPLICATION NUMBER: 60/061,527
; PRIOR FILING DATE: 1997-10-09
; PRIOR APPLICATION NUMBER: 60/061,536
; PRIOR FILING DATE: 1997-10-09
; PRIOR APPLICATION NUMBER: 60/061,532
; PRIOR FILING DATE: 1997-10-09
; NUMBER OF SEQ ID NOS: 727
```

```

; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 344
; LENGTH: 45698
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-984-429-344
```

```
Query Match      1.2%; Score 45.6; DB 6; Length 45698;
Best Local Similarity 50.8%; Pred. No. 6.9;
Matches 134; Conservative 0; Mismatches 129; Indels 1; Gaps 1;
```

```
QY 1609 aagtagacgaatctactgtactgtactgtactgtactgtactgtactgtactgtactgt 1668
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 31895 ATGTTCTGTAGTCTACTGTACTGTACTGTACTGTACTGTACTGTACTGTACTGTACTGT 31836

QY 1669 gtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 1728
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 31835 ATGTGAATCCCTAAAGCCTAACCTAAAGATACAAAGATATATATATATATATATATAT 31776

QY 1729 gcgagccttaagaataacatacatalcaaatcaaatcaaatcaaatcaaatcaaatca 1788
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 31775 GATAAATTTTAATCAAAATCTAAATAGTATTCAAAATTTGTCAAAAAGCGCAAAATGGGAA 31716

QY 1789 aaagttattgaattgagcagctgttaacagagaataacataatgtgttaaacctcaagacta 1848
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 31715 ACAGAGAGAAACAGAGACAAACAGAGAAACAAATAAATGCTAGTCTTAA-TCCAAACATA 31657

QY 1849 actgctcctacagttattagcgta 1872
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 31656 TCTGTATCTATATCTATATGCAATA 31633
```

```

RESULT 10
US-09-785-381-6
; Sequence 6, Application US/09785381
; GENERAL INFORMATION:
; APPLICANT: DALLOS, Peter
; APPLICANT: ZHENG, Jing
; APPLICANT: MADISON, Laird
; TITLE OF INVENTION: A MAMMALIAN PRESTIN
; FILE REFERENCE: 0290-37U1
; CURRENT APPLICATION NUMBER: US/09/785,381
; PRIOR FILING DATE: 2001-02-16
; PRIOR APPLICATION NUMBER: US 60/183,461
; PRIOR FILING DATE: 2000-02-18
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 6
; LENGTH: 29485
; TYPE: DNA
; ORGANISM: homo sapiens
US-09-785-381-6
```

```
Query Match      1.2%; Score 44.8; DB 6; Length 29485;
Best Local Similarity 54.2%; Pred. No. 9;
Matches 91; Conservative 0; Mismatches 77; Indels 0; Gaps 0;
```

```
QY 630 agtaacagacgtgtgaaagcaggaatttagacaagaactaaagctgtgtgtatcaaat 689
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 14663 agtacagcaccactgaaacaaactacccaattgttaagaccattgtgtgtgtgataaact 14722

QY 690 caatcaacttaacccaagaataacagatgctttcaaaaactgaactaagaagaagtagcgaa 749
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 14723 gcataactaalgycgaataaataacagcagctagcatcatatgacagatgaactaaattccacat 14782

QY 750 aaagcattgaatgagatgaagctgcgtctacttccaaagttagaag 757
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 14783 aacaatttaaccttaaatgtlaaatlggctlaaatlgcccaattaaag 14830
```

RESULT 11





```

: APPLICANT: Labat, Ivan
: APPLICANT: Stache-Crain, Birgit
: APPLICANT: Dickson, Mark
: APPLICANT: Jones, Lee W.
: TITLE OF INVENTION: Novel Nucleic Acid Sequences Obtained
: TITLE OF INVENTION: From Various Libraries
: FILE REFERENCE: 774
: CURRENT APPLICATION NUMBER: US/09/933,524A
: CURRENT FILING DATE: 2001-08-20
: PRIOR APPLICATION NUMBER: 09/528,409
: PRIOR FILING DATE: 2000-05-17
: NUMBER OF SEQ ID NOS: 116231
: SOFTWARE: HY-patent.pl Version 3.1
: SEQ ID NO 104709
: LENGTH: 396
: TYPE: DNA
: ORGANISM: Homo sapiens
: FEATURE:
: NAME/KEY: misc.feature
: LOCATION: (1)..(396)
: OTHER INFORMATION: n - A,T,C or G
US-09-933-524A-104709

```

```

Query Match 1.2%: Score 44; DB 6; Length 396;
Best Local Similarity 47.2%; Pred. No. 3.2;
Matches 134; Conservative 0; Mismatches 150; Indels 0; Gaps 0;

```

```

QY 1268 ctattacagatgttgaacgtgaacacgcatcagtaattgacatctacttctgttctca 1327
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 338 CTACTGCGAGTGTGATGCTGCTACTCTACTGCTGCAAGCTGCTGCTGCTGATGCTG 279

QY 1328 caattactatctacgttaaagaagcgttagtaactggttaaacatatataacttgcata 1387
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 278 CTACTGCAACGTGCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCA 219

QY 1388 ataagttaaacattactgtgttacaalgcagaagcttaagtgtagtttactgtca 1447
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 218 CGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 159

QY 1448 agcaatcagcaacacgtgttctacagctctactactttaggtgtgtacaaattatc 1507
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 158 CCACAGCTGCTGCACTGCCGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 99

QY 1508 ctggttccttacaacaagtgttggttaattgtgctgtgtgt 1551
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 98 CTGCTACTCTCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 55

```

```

RESULT 15
: Sequence 248315, Application US/09985678
: GENERAL INFORMATION:
: APPLICANT: Cheikh, Nordine
: APPLICANT: Liu, Jindong
: TITLE OF INVENTION: Annotated Plant Genes
: FILE REFERENCE: 16517.255/38-21(15097)F
: CURRENT APPLICATION NUMBER: US/09/985,678
: PRIOR FILING DATE: 2001-11-05
: PRIOR APPLICATION NUMBER: US 09/304,517
: PRIOR FILING DATE: 1999-05-06
: NUMBER OF SEQ ID NOS: 295529
: SEQ ID NO 248315
: LENGTH: 442
: TYPE: DNA
: ORGANISM: Glycine max
US-09-985-678-248315

```

```

Query Match 1.2%; Score 43.8; DB 6; Length 442;
Best Local Similarity 48.2%; Pred. No. 3.7;
Matches 123; Conservative 0; Mismatches 132; Indels 0; Gaps 0;

```

```

QY 1826 atgagttcaaaactcaagacttaactgctctacagttattagcgttaacgtctaaatg 1885
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 360 ATGAGTATTATTGTTGATGTAGAGCTGAGACTGCAAAAGTGGCTTAGAGTGGAAAGCAG 301

QY 1886 gcyagcttgatlaaaaglaactgaagctcaagaatttacttgtagtctcagaagaatt 1945
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 300 TTGTTGCTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTG 241

QY 1946 taataacatttaatgctacaacgcttgcggttagcacaatacaatacaggtcagtgctg 2005
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 240 CAACGTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTG 181

QY 2006 taagtaaaagcgggtgcacacitactgctcttaccagcaagtgacatctccagctagt 2065
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 180 TGATGCCCTCTGTGACAAAGCTTTGTTGCAATTAATCTGCAACGAGATGATGCAACTGTGT 121

QY 2066 ttgaagcgttactg 2080
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 120 CTGCTGCTGCTGCTGCTG 106

```

Search completed: January 10, 2002, 00:14:18  
Job time: 6098 sec

**THIS PAGE BLANK (USPTO)**